CANADIAN CENTRE FOR THE STUDY OF CO-OPERATIVES (CCSC)

Against the Grain: The Unusual Case of Saskatchewan's Credit Union Deposit Insurance Scheme

Author(s): **Marc-Andre Pigeon**, *CCSC Director and Assistant Professor, Johnson Shoyama Graduate School of Public Policy*

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JOHNSON SHOYAMA
Canadian Centre for the Study of Co-operatives
UREGINA USASK

Canadian Centre for the Study of Co-operatives
101 Diefenbaker Place
University of Saskatchewan
Saskatoon SK Canada S7N 5B8
Phone: (306) 966–8509 / Fax: (306) 966–8517

E-mail: coop.studies@usask.ca
Website: http://www.usaskstudies.coop

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1.0 INTRODUCTION

In response to the financial crisis, governments the world over took unprecedented steps to right-size their economies by introducing unprecedented (in recent memory) fiscal stimulus, announcing policies to purchase billions of dollars of "toxic" assets, taking over failing banks, and deploying "quantitative easing." While these measures continue to generate considerable academic, policy, and public scrutiny, far less attention has been paid to the concurrent move to introduce, alter, or merely review the deposit insurance schemes that backstop depositors in the event of a bank failure. It may be that the relative quiescence around these policy efforts underlines the remarkable expansion and acceptance of these schemes as solutions to the age-old problem of how to avoid bank runs and their attendant economic consequences.[1] As recently as 1980, there were fewer than twenty countries with deposit insurance schemes (Demirgüç-Kunt, Kane, and Leaven 2008). Since then, the policy has become almost universal, with deposit insurance schemes now in 143 out of 195 countries (IADI 2018).

Alongside the universalization of these schemes, policymakers have developed a set of "best practices" that address common design problems around the well-understood moral hazard, adverse selection, and agency problems that arise from these schemes (Garcia 1999; IADI 2014). As Garcia notes (1999), these best practices are increasingly commonplace, but there are exceptions. The Province of Saskatchewan is one such notable exception. Its provincially chartered credit unions have operated under a scheme for sixty-five years that has not once incurred a deficit position.[2] This is remarkable given historical bouts of insolvency with US, Canadian, and other sovereign-backed schemes for banks (Saskatchewan is a subnational entity and does not own or control a central bank).

It is arguably more remarkable because Saskatchewan's scheme cuts against the grain of many best practices outlined by the International Monetary Fund (IMF) and the International Association of Deposit Insurers (IADI) including, most notably, the recommendation against the kind of unlimited deposit insurance that the province has had over this period. This is the "prime directive" in deposit insurance scheme design. As the IADI notes, "Deposit insurance, like any insurance, must be designed to mitigate the impact of moral hazard on the behaviour of shareholders, bank managers and depositors …" (IADI 2014, 11). Globally, only Belarus, Turkmenistan, and Venezuela offer similar unlimited coverage.

But the fund's success is also remarkable because Saskatchewan's economy is tied to the commodity cycle (agriculture, potash, oil and gas) and as such, has a long history of the kinds of booms and busts that make it difficult for banking institutions to prosper *particularly* if, as in Saskatchewan, they lack a branch network that would help them diversify exposure away from these cyclical tendencies. As the IADI also notes, "Persistent instability hampers the functioning of markets, and such conditions affect the ability of financial institutions to absorb and manage their risks" (IADI 2014, 12).

So how can we explain the success of this fund? In this paper, I test the proposition that Saskatchewan's deposit insurance scheme—initially the product of a credit-union-led, -owned, and -directed entity called the Mutual Aid Board/Fund—embodied until recently many of the features that Ostrom (2000, 2015) identified as key to the successful if seemingly improbable management of a common pool natural resource. Drawing on an initial review of some archival material, published accounts, and official documents, I propose that Saskatchewan's scheme represents a socially determined common good along the lines of the arguments found in Périlleux and Nyssens (2017), who show that co-operative financial institutions can be understood as human-made commons. That said, my research suggests that this deposit insurance scheme and its common-pool nature owed at least as much to government actions as it did to the credit unions that operated and mostly governed the scheme. Further, if Saskatchewan's insurance scheme can be said to have evolved to a point where it more or less conforms to Ostrom's design principles, then this may have some important implications for anticipating the consequences of what could happen as the deposit insurer gradually unwinds some of these design features—a situation that now seems to be happening.

2.0 DEPOSIT INSURANCE AS POLICY SOLUTION

Theoretically, the policy case for deposit insurance can be traced back to Diamond and Dybvig (1983), who developed a model showing that almost anything—including sunspots—can trigger a bank run, and that deposit insurance can, optimally, eliminate the risk of a bank run because with deposit insurance "it never pays to participate" in the run. Notwithstanding their theoretical findings, Diamond and Dybvig were aware of the well-known incentive problems that arise from deposit insurance, particularly the question of moral hazard. Deposit insurance is said to give rise to moral hazard behaviour because it eliminates the incentive for depositors to monitor their banking institution (Calomiris and Jaremski 2016). Banking institutions then have an incentive to take on more risk—primarily through riskier lending—than they would if depositors were paying attention. While Diamond and Dybvig do not model the potential moral hazard consequences of allowing bank manager discretion over their loan portfolio—noting only that this would be an "interesting extension of our model"—they speculate that deposit insurance is nevertheless "desirable" with appropriate regulatory oversight.

Policymakers have adopted policies that align with the Diamond and Dybvig (1983) model, operating as if there is some optimal amount of finite coverage that balances moral hazard costs against the benefits of avoiding bank runs. They have deployed a variety of risk-sharing measures, many borrowed from conventional insurance policies (e.g., home, auto), including limited coverage, use of risk-based pricing for insurance premiums and capital, and liquidity and lending standards. Coverage limits are set to insure a high percentage (e.g., 97–99 percent) of retail (i.e., small) deposit account holders (Australian Treasury 2011; Department of Finance 2016). The assumption is that while it may be unrealistic to expect small retail depositors to monitor banks, institutional and high-income individuals have the capacity to pay attention to underlying fundamentals and not succumb to self-fulfilling prophecy-type runs.

In a survey for the IMF from the late 1990s, Garcia (1999) itemizes some best practices around the design of deposit insurance. These are largely reflected in the IADI's subsequent 2014 updated guidance on the core principles of deposit insurance. Table 1, right, shows the major elements of these practices and principles and indicates the extent to which we might say that Saskatchewan's deposit insurance scheme aligns or fails to align with these best practices. This analysis shows that Saskatchewan's deposit insurer is deficient on eight of the fifteen items and yet, as the deposit insurer points out, no credit union member or customer has ever lost a dollar on their deposits. Nor has the fund been depleted.

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Table 1: Saskatchewan Deposit Insurance Fund versus IMF Best Practices

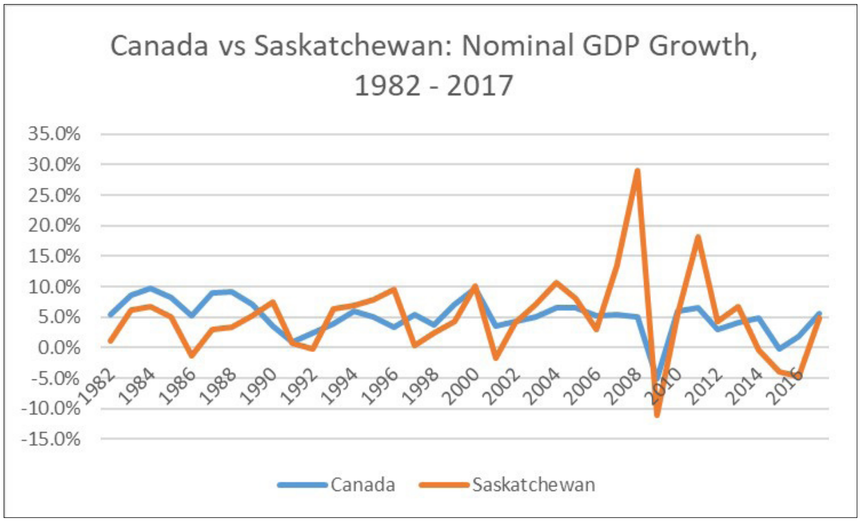
	Design Feature	Alignment of Best Practices with Saskatchewan Credit Union Regulatory Framework (2018)	Overall Assessment of Alignment
1	Limited (low) coverage to avoid moral hazard problems	No coverage limits. According to the FAQ section of the provincial depositor/regulator's website, "Deposits held in Saskatchewan credit unions are fully guaranteed. There is no limit to the size of the deposit covered by the guarantee—whether $1 or $1,000,000 or more, all deposits are guaranteed" (CUDGC, FAQ).	X
2	Access to government support/loan facilities	Unclear. The website has contradictory statements. On the one hand, the FAQ notes that "while there is no explicit provincial government backstop on deposits held in Saskatchewan credit unions, the Corporation does have the ability to access financing from any government or regulatory body inside or outside of Canada." On the other hand, the website's historical narrative says that 1972 legislative changes "entrenched the credit union guarantee in legislation. This meant that the guarantee of full repayment of all funds on deposit wasn't just a promise, it was the law." As a further point of fact, the deposit insurer's 2018 annual report notes that based on recent progress in talks with the Bank of Canada around emergency lending assistance (ELA), it will "proceed with engaging government to determine the province's appetite for signing an indemnity agreement (as a necessary condition of ELA.)" ELA is the Central Bank's "lender of last resort" tool and widely seen as of great value because of the central bank's unlimited capacity to backstop the banking system (CUDGC 2018).	X
3	Bankers not on the main board (can play an advisory role)	Credit unions no longer have direct representation on the board of the provincial deposit insurer/regulator. Further, the deposit insurer has outsourced many if not all of the functions previously performed by Saskatchewan Central, the wholesale entity owned by the province's credit unions. However, the province's Credit Union Act gives SaskCentral the right to nominate half of the deposit insurer's board members.	X
4	Risk-adjusted premiums	The insurer's premiums are set at a flat rate of 0.08 percent of deposits.	X
5	Make appropriate disclosure	The deposit insurer/regulator provides little in the way of public information about Saskatchewan's credit unions. Further, requests by the author for data have so far gone unanswered. While good information can be culled from annual reports, this is a time-consuming process. By contrast, federal regulators make available considerable information about banks in easily accessible forms online.	X
6	Public awareness targets	IADI principle 10 stresses the importance of setting public awareness targets and devoting resources to achieving this goal. The Saskatchewan deposit insurer does not appear to have adopted this principle.	X
7	Prompt reimbursement	The deposit insurer does not appear to provide any public commitment to reimburse depositors within a set period of time (the IADI recommendation is that most insured deposits be reimbursed within seven days).	X
8	Depositor insurer should have, by law, the power to recover its claims in accordance with creditor hierarchy	Credit unions and hence their regulators do not have access to the federal Winding Up and Restructuring Act (WURA) and as such, lack a clear legal path to recoveries.	X
9	Ensure close relations to lender of last resort and supervisor	The deposit insurer is the regulator. It has only an informal relationship with the Bank of Canada.	≈
10	Independence/ accountability	The deposit insurer/regulator appears to have a reasonable degree of independence from the provincial government and, increasingly, the credit union sector.	✓
11	Define the system explicitly in law and regulation	While there remains ambiguity around the provincial government's willingness to support/backstop the deposit insurer, the provincial system is generally well defined in legislation and regulation.	✓
12	Regulator has access to prompt remedial action tools	The legislative framework and deposit insurer's mandate stress the importance of remedial action and have regulatory oversight — and regulator remedial action — as the first line of defence in protecting the interests of depositors.	✓
13	Ensure adequate funding to avoid insolvency	Saskatchewan's deposit insurer says that its fund — at 1.58 percent of insurable deposits — is one of the strongest in the country. It also notes that no credit union member has ever lost a penny on their deposits at a credit union.	✓
14	Membership must be compulsory	Provincial credit unions must be part of the deposit insurance fund.	✓
15	Regulator has access to good information	Deposit insurer/regulator prides itself on staying aligned with latest international regulatory standards and therefore expects information quality to align with these standards.	✓

3.0 SASKATCHEWAN AND ITS DEPOSIT INSURANCE SYSTEM

The Province of Saskatchewan has long been one of Canada's "have not" provinces. Its population has held constant at about 1 million since the early part of the twentieth century, its economic fortunes tied closely to the agricultural commodity cycle and, more recently, the fate of potash, uranium, and oil and gas. It is a challenging jurisdiction in which to do business, especially from a banking system perspective. Figure 1, below, compares the province's fluctuations in (nominal) gross domestic product over a thirty-five year period from 1982 to 2017. It shows that Saskatchewan's economy has experienced considerably sharper ups and downs than the country as a whole, especially in the more recent period with the "commodity supercycle." Over the 1982 to 2016 period, the variance in Saskatchewan's GDP is 4 percent, more than five times higher than the variance in GDP for the country as a whole (Statistics Canada CANSIM Table 384–0038).

Saskatchewan's credit union system emerged in the late 1930s as the province struggled with the combined effects of a seven-year drought and the Great Depression. As the Credit Union Deposit Guarantee Corporation (CUDGC 2018) notes, "Tens of thousands of farmers, especially in the 'dust bowl' of southern Saskatchewan, lost virtually everything. Hundreds of businesses failed. Banks closed scores of rural branches in Saskatchewan, as borrowers were unable to keep up loan payments.[3] Obtaining credit became virtually impossible just when people needed it most to make a new start."

Figure 1: Canada vs. Saskatchewan: Nominal GDP Growth



Under the leadership of a government economist named Barney Arnason, the province created a legislative framework in 1937 to enable the formation of credit unions. The impetus for credit unions therefore originated in government and not "from the community," as is the case in other regions of Canada (e.g., Quebec, Atlantic Canada). Nevertheless, communities throughout the province saw the potential and quickly set up their own community credit unions. In 1965, less than thirty years after the first credit union was established, the province had a peak of 301 credit unions. As Schroeder notes (1983), the context was right for this kind of mushrooming to take place. The province was still young (it was only created in 1905), the eastern banks did not seem terribly interested in servicing the province, particularly in rural areas, there was a recent and positive history with co-operatives in the agricultural and gasoline refinery sectors, and there were few if any locally based corporate entities with enough power to block the emergence of a co-operative financial sector.

Alongside the emergence of these credit unions, the sector understood that it needed to collaborate to learn from one another, obtain economies of scale, advocate for policy changes, and protect their shared reputation as banking institutions. The result was the creation of several entities that constituted "the second tier," including bodies such as the Credit Union League of Saskatchewan, which was primarily engaged in advocacy and education, and the Saskatchewan Co-operative Credit Society, which served as the credit union system's "central bank" or last-resort lender. In the early 1970s, these entities were merged into what is today called Credit Union Central of Saskatchewan, or SaskCentral for short.

The Saskatchewan credit union system's rapid growth was not without its challenges. In the early 1950s, for example, the province experienced a sharp downturn in the agricultural economy that, paired with criminal misappropriation of funds by two credit union managers, posed a serious challenge to the sector's reputation. In one case, the fraud represented as much as 55 percent of member deposits; in the other, 45 percent. As CUDGC (2018) notes, "Recognizing what this could mean for public confidence, credit unions established a support fund that would accept voluntary contributions from credit unions to help out depositors at the two credit unions. It was also increasingly clear that a permanent solution to this potential problem was needed. Discussion with the provincial government followed and in 1953, the Mutual Aid Fund was created and the Mutual Aid Board appointed to manage it."

I will unpack this process and subsequent developments from the perspective of Ostrom's eight design principles.

4.0 CONFORMITY WITH OSTROM'S DESIGN PRINCIPLES

In her Nobel-prize winning work, Elinor Ostrom (2000, 2015) posed a provocative question: how do you explain the remarkable success of communities that have managed natural resources such as pasture land, timber resources, and groundwater and irrigation systems, over hundreds of years in places as varied as Switzerland, Japan, Spain, and the Philippines? She characterized these resources as "common-pool" in the sense that while it is difficult to exclude access to them, there are clear limits to the amount of extraction that can take place (i.e., they are rivalrous goods). Theoretically, these nonmarket, nongovernment management systems should not exist, let alone persist. Garrett Hardin (1968) theorized about the "tragedy of the commons" and predicted that efforts by individuals to exploit a scarce public resource would end in a tragedy of over-exploitation and resource depletion, a proposition that can be formalized in prisoner's dilemma models of strategic behaviour. The rational for this view is that while extractors are incentivized to draw as much as they can from the natural resources, they are simultaneously discouraged from making investments that could enhance the sustainability of these resources because of free-rider problems.

We can profitably think of the credit union system's reputation, and that of its deposit insurance scheme, as a common pool resource. The reputation is non-excludable – all credit unions by virtue of being credit unions benefit from the good reputation of the brand. It is also, however, rivalrous. If one credit unions draws down on the resource because of poor behaviour (i.e., calls on the deposit insurance fund or the rest of the credit union for support), that erodes the value of the resource (reputation and the fund balance) available to the rest of the credit union system.

From her extensive field work and case studies, Ostrom identified eight design principles that, together, seemed to characterize successful efforts to govern these kinds of common pool resources. The first principle stresses the importance of establishing clear boundary rules about who can or cannot draw on the resource. This protects both the integrity of the collective effort to manage the resource and limits potential over-exploitation. The second says that benefits and costs must be allocated proportionately. This helps set up the proper incentives for access and investment into the sustainability of the resource. The third points to the importance of having the resource extractors devise their own governance structure and resulting rules. This underlines the significance of specialized knowledge about the resource but also the importance of legitimacy. Principle four says there should be low-cost arenas for dispute resolution. Human conflicts are unavoidable, particularly in situations of scarcity. The challenge is to manage them in a way that minimizes disruption to the governance system.

Principle five, which advocates self-monitoring, aligns closely with the idea that the resource extractors should set their own rules. Principle six suggests that it is important to look at escalating sanctions, recognizing that punitive measures can worsen social dynamics around the management of a common resource, whereas escalating penalties provide an opportunity for guilty parties to "save face." Principle seven identifies the need for a supportive policy environment that respects the local rule-making, sanctioning, and dispute resolution mechanisms. Well-run common pool resources can be undermined by ill-informed outside interference. Finally, principle eight points to "nested decision making," which will insure three things: the legitimacy and binding nature of rule-making; the information gathering needed for good decisions; and the education of participants who take part in these multiple decision-making forums.

While Ostrom's work focuses on natural resources "commons"—spaces that are neither publicly managed nor privately held and are therefore nonexcludable—we can conceptualize the credit union brand and its associated credibility or lack thereof as a socially constructed commons. Much like a natural-resource commons, this socially constructed commons can be exploited in a way that depletes its value. If, for example, a credit union behaves in a reckless fashion that puts the business at risk, this can undermine the value or sustainability of the credit union brand because members/customers have difficulty discerning "good" from "bad" credit unions. The result could be a classic "deposit run," where members assume a loss-aversion disposition and move their money away from credit unions into banks under the sway of the idea that it is better to be safe than sorry (i.e., loss aversion).

4.1 Origins of the Scheme: Boundary Rules

It was precisely this fear that drove the system to act when, in 1950 and 1951, managers at two credit unions, as noted above, were found to have misappropriated funds that put their credit unions in jeopardy. Soon after, in early 1951, "several credit unions" voluntarily "sent cheques to the Credit Union League with the intention of helping to cover the loss" (Schroeder 1983, 32–33). By 1952, credit unions were mobilizing to set up a stabilization fund, reaching out to co-operative sector partners (Saskatchewan Wheat Pool, Federated Co-operatives Limited, and Co-operative Life Insurance Company) and working with government to draft amendments to the Credit Union Act in early 1952 to create the Mutual Aid Fund. The amendments were passed in April, and the fund came into being in July.

This was not the end of the discussion, however. The Credit Union League debated both the amendments and the fund in the fall because, although it was widely understood that defalcations were harmful to the system as a whole, some felt they were under "no obligation to bail…out" other credit unions, particularly those brought down by theft (Schroeder 1983, 39). The debate was to be settled by a vote and, according to Schroeder, "unless at least one-half of all credit unions with a total membership of at least two-thirds of the total provincial credit unions voted in favour of the plan (i.e., amendments), it (the fund) would not be instituted" (39). In the end, the fund received the support of 79 percent of credit unions representing 80 percent of provincial membership. The Mutual Aid Board came into being less than a year later. As Schroeder notes, the legislative amendments were "a further development of the concept of sharing of resources and accepting responsibility for losses for the benefit of the whole" (38).

From an Ostrom perspective, the creation of a mandatory fund—after initial experimentation with a voluntary fund—amounts to an extreme version of clearly defined boundary rules but also a supportive policy environment. Credit unions advocated for and received support for mandatory membership, and they ultimately had a veto over the creation of the fund. This created sufficient conditions for the sector to self-monitor—and administer what were effectively graduated sanctions—in a vigorous, sustained, and fair way, as I discuss below. To illustrate the importance of this mandatory piece, consider that the Credit Union National Association's attempts to set up a stabilization / deposit guarantee fund floundered on the voluntary nature of the schemes (Schroeder 1983, 52). Further, historical research strongly suggests that voluntary schemes suffer from adverse selection and free rider problems (Calomiris 1989).

4.2 Governance and Operations: Rule-Making Powers, Conflict Resolution, and Nested Decision Making

Over the years, the relationship among credit unions, their second-tier organizations, the government, and the Mutual Aid Board (MAB) evolved from one where the government played a significant oversight and promotion role to one where the sector gradually took on more responsibility for self-regulation, education, and promotion of the credit union model through the league (later SaskCentral), the Saskatchewan Co-operative Credit Society (later SaskCentral), and the MAB (later CUDGC) (Schroeder 1983). In short, the sector had an increasing hand in setting its own rules. There appear to have been three distinct phases in this process.

During Phase I (1953–1961), regulatory responsibility rested largely with the provincial government through the Registrar and/or the Department of Co-operation. Nevertheless, during this period, the credit union sector assumed increased responsibility from the Department of Co-operation for promotion, development, and education around the credit union model.

Over the course of Phase II (1962–2016), the province transferred power and responsibility for supervising and regulating Saskatchewan credit unions to entities effectively controlled by the sector. There were a number of steps. In 1962, the province changed the Credit Union Act to empower the MAB to wind up failing institutions that had received its support. This function had previously been held by the Department of Co-operation, which ceded some control over this activity because of the cost of administering a growing number of dissolutions.[4] Similarly, the league hired an increasing number of field representatives — its eyes and ears on the ground — and concurrently "assumed some of the duties performed by government inspectors in the early years" (Schroeder 1983, 54). It also played a role in liquidations, with staff from its collections agency working on contract through the registrar, who in turn was effectively an agent of the MAB.

The provincial government initiated more transfers of power in the 1970s, with notable changes to the *Credit Union Act* in 1972 and 1977. In 1972, the province ended what was known as the revolving fund plan whereby by statute the fund was required to return assessments to credit unions once it had reached a certain size. The MAB also ceased to pay interest on credit union assessments. Schroeder (1983, 77) says these two measures, coupled with the impact of new federal income taxation (discussed below), helped to effectively end credit union ownership of the fund/MAB. Up until that point, there was an understanding that were the fund to be dissolved, the accumulated balances would be dispersed to credit unions less any assistance received from the fund.

Meanwhile, the province gave the MAB new regulatory powers:

- to introduce new mandatory credit union insurance programs (e.g., fire insurance, bonding)
- to create a new Central Credit Committee to review loans (it would play an important role in helping the sector gain comfort in commercial lending)
- to put credit unions under supervision
- to require a further assessment if the fund was felt to be inadequate

Finally, it also changed the composition of the MAB board to include two government-appointed members on the five-member board, although in practice, the government had only one representative until the 1977 legislative changes. According to Purden (1980, 203), the provincial government felt compelled to act because of an "overriding concern with political relationships" that seem to have led to inadequate government oversight over credit unions.

The 1977 legislative changes were most notable because, according to Schroeder (1983, 98), the province for the first time "clearly stated that there was an unlimited guarantee of all shares and deposits in credit unions."[5] Along with this backstop, the province—with the support of SaskCentral—gave the MAB expanded powers to prescribe regulatory standards, all with the aim of preventing problems before they arose. The 1977 changes also made it clear that the provincial government *must* have two representatives on the five-member board, one of whom would be the deputy minister of finance or his/her nominee, and the other, the registrar for credit unions. In the more recent Phase III (2017–present), the MAB *cum* CUDGC has retained its regulatory role but appears

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to have increased its independence from credit unions and government. I will discuss this phase in the relationship among credit unions, CUDGC, and the province in more detail below.

Whatever the impact of these changes, credit unions have maintained a considerable degree of influence over the board from a governance perspective. Not only did they have a veto over the establishment of the fund and the MAB (see discussion above about the 1952 vote), Saskatchewan credit unions were initially entitled to appoint four (later three) of five board members. The league elected three representatives (usually two league board members plus one other), the credit society another, and the provincial registrar the fifth. At the same time, the Mutual Aid Board outsourced its operations to the credit society, which, as mentioned, later morphed into the modern-day Saskatchewan Central or SaskCentral, an entity 100 percent owned and controlled by the credit union system. Initially, the fee associated with these operational/management services was set at a nominal $25, underlining the close association between the credit fund/MAB and the credit union sector.

The credit union voice could also be "heard" in multiple places (i.e., nested decision making), all culminating in information and decisions flowing up to the MAB. Members could raise concerns with their credit unions and seek decisions through their local credit union board. Credit unions, in turn, could air concerns and resolve conflicts at regional meetings and bring issues to a vote at meetings of the league and the credit society.[6] And credit unions could influence the Mutual

Aid Board directly through conversations with their credit union and league representatives. In her 1980 report for Credit Union Central of Saskatchewan, Purden writes, for example, that "strong emphasis is placed on close and regular communication between credit unions and the Board (MAB), so that a high level of cooperation can be attained in ensuring the stability of the system as a whole" (205).

4.3 Funding: Proportionate Costs/Benefits

The Mutual Aid Board and its successor, the Credit Union Deposit Guarantee Corporation, appear to have always operated on the basis of a set fee or assessment. At inception, the assessment was calculated as five percent of net income. Today, it is calculated as 0.08 percent of credit union assets, which amounts to a proportionate allocation of costs relative to the size of the credit union. SaskCentral operates on a similar basis, although larger credit unions have historically complained that benefits were not proportional to costs. From an Ostrom perspective, this approach to pricing can be characterized as a proportionate means of allocating costs.

4.4 Mutual Aid Board Poicy Tools and Powers: Monitoring and Graduated Sections

The Mutual Aid Board and its fund deployed several tools to turn around the defrauded credit unions, using a combination of interest-free loans, grants-in-aid to recapitalize the credit unions and cover some expenses, and what today might be referred to as a "bad bank" and "good bank" or, in this case, "bad credit union" and "good credit union." The former held the outstanding loans from the period up to the discovery of fraud and sought to rebuild its capital, while the latter accepted new deposits and offered loan services. These would become key instruments in the board's toolkit and, from a modern-day perspective, represent a significant degree of policy innovation as this is now considered standard practice in resolving failed banks.

In the end, the board was successful in turning the failed 1950–1951 credit unions around (the bad and good credit unions were eventually merged together), thanks in part to strong community support. As becomes clear from historical accounts, the Saskatchewan system then—and to a lesser extent today—benefitted from a considerable degree of legitimacy because of its local ownership and control—legitimacy that helped support the development and stability of the system and the Mutual Aid Fund/Board.

It is particularly notable that the turnaround at these two credit unions did not appear to rely on any extraordinary or heavy-handed paternalistic interventions, but relied instead on local legitimacy and mutual support. As Schroeder recounts, while the managers at the credit unions were both let go and convicted of crimes, "no elected officials were ousted from office" (1983, 42). In fact, a director at one of the two failed institutions subsequently became the manager of his credit union. From an Ostrom design principle perspective, this story strongly suggests a system working to resolve its own problems in a measured way that sought to preserve the social bonds that formed the core of the credit union sector's legitimacy.

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These kinds of legitimacy considerations plus the eventual implied provincial backstop led the Mutual Aid Board—and the credit union system—to put a great deal of emphasis on developing "early alert" systems that would help the board (and other credit unions) monitor each other. This can be seen in a number of ways. In the early 1970s, the MAB worked with a University of Western Ontario professor to develop a model that would help identify credit unions that were likely to experience financial difficulties.[7] Later, as the province's implicit guarantee became more explicit, the MAB developed a "watch list" process that would escalate the fund's involvement in the management of the credit union based on the severity of its situation (i.e., a form of graduated sanctions).

Meanwhile, Saskatchewan credit unions, through the fund and SaskCentral, led the effort to obtain a federal backstop for their provincial deposit guarantee fund and eventually obtained favourable legislative changes to the *Canada Deposit Insurance Canada Act* (CDIC) that effectively turned CDIC into a lender of last resort for the provincial credit unions. Schroeder notes in passing—and this is worthy of further investigation—that Saskatchewan credit unions helped support credit unions in other parts of the country experiencing difficulty—notably Ontario and the territories. Finally, Saskatchewan credit unions played a fundamental role in creating and financially supporting a national apex organization called the Canadian Co-operative Credit Society, adding yet another layer of nested decision making to the credit union system. As Schroeder's account makes clear, these actions were all undertaken because of an understanding and realization that the system's legitimacy hinged on popular perception that extended not just provincially but nationally and even beyond.

4.5 Relationship with Government: A Supportive Policy Environment

From the foregoing, it appears the Saskatchewan government by and large provided a policy environment supportive of the sector's efforts to self-regulate. The provincial government imposed—at the sector's behest—mandatory participation in the scheme and supported the strong credit union influence in governing it. The government also made legislative changes that gradually shifted more responsibility to credit-union-controlled entities, especially the Mutual Aid Board and later, the Credit Union Deposit Guarantee Corporation. While there is some debate as to the true nature of the guarantee, the province's 1977 legislative changes arguably provided at least a hint of an explicit backstop to the deposit insurance fund. As Schroeder notes (1983, 76), there were "close and friendly relations between the provincial government and the system." While most authors do not say so overtly, that positive relationship seemed to have hinged at least on part the support of the New Democratic Party, which governed the province through much of the postwar period. When it lost power, between 1968 and 1971, the relationship became less amicable. When it resumed power, "almost immediately the climate improved" (Purden 1980, 207).

It would be incorrect, however, to imply that the provincial government took direction from the sector. While credit unions understood the benefit of government support, the government also understood the importance of making sure the sector was well regulated and, most importantly, took preventive measures to arrest any problems. Schroeder's account discusses, for example, Premier Tommy Douglas's active role in encouraging credit unions to solve their legitimacy and brand problem arising from the two failed credit unions. It also addresses the province's recognition that it lacked the resources to manage the wave of dissolutions in the early 1960s, its willingness to let the sector take on more self-regulation, and its support for getting a federal backstop in place.

If the province was generally supportive of the credit union sector, the same could not be said of federal policymakers, who were hostile, for example, to the idea of allowing provincial credit unions to join the Canada Deposit Insurance Corporation created in 1967. The federal government offered several rationales, including the fact that credit unions were provincially regulated, were too small to affect the financial system, had bonds of association that meant they weren't true public deposit institutions, and already had their own deposit insurance fund (Schroeder 1983, 67).[8] Nevertheless, the Province of Saskatchewan went ahead and amended the Credit Union Act to allow for the possibility that the Mutual Aid Board could serve as an agent for CDIC, recognizing, as did the credit unions, the importance of confidence and reputation to banking in general and credit unions in particular.

Notwithstanding the federal government's claim that credit unions were too small to affect the overall banking sector, the sector's growing market share and influence drew the attention of Canada's large banks and other private interests.[9] An advocacy group called the Equitable Income Tax Foundation "pressured the federal government to remove all tax exemptions for credit unions" (Schroeder 1983, 72) and was successful in influencing both the Carter Commission (which was conducting a Royal Commission into taxation) and, ultimately, federal taxation policy. Credit unions became subject to taxation starting in 1972, but thanks to a lobby campaign involving "hundreds of thousands" of Canadians who supported credit unions and co-operatives (Purden 1980, 229), were subject to only a lower, small-business taxation rate and continued to be exempted from taxation on dividends, interest, and rebates to members.[10]

For the Mutual Aid Fund and its board, the taxation issue proved near fatal. Following the sweeping 1972 tax changes, its tax advisors interpreted the new rules as requiring the fund to pay tax on both credit union assessments and net earnings generated from the resulting fund. Further, the taxation would be retroactive to the beginning of the fund in 1952/53. In the end, federal policymakers agreed not to tax the fund's assessments, but levied taxes strictly on net earnings from investments, while allowing a range of deductible expenses to help minimize the tax burden. Nevertheless, the taxation policy amendments drove some important changes, including a more formal arrangement between the fund/MAB and the credit society. To illustrate, instead of charging a nominal fee for its management services, the credit society negotiated a formal contract that reflected the true costs of its services. The result was a bill for $200,000 in 1973, up from $3,500 in 1972. The MAB made these changes because the new tax framework made it important to more clearly establish independence from the wholly credit-union-owned and -controlled credit society.

4.6 Summary of Alignment with Ostrom Design Principles

Using Ostrom's eight design principles, Table 2, below, summarizes the previous conversation, assessing the structure of Saskatchewan's deposit insurance scheme as it existed until recently. It suggests that the Mutual Aid Board — later the Credit Union Deposit Guarantee Corporation —embodied to a greater or lesser degree most of Ostrom's design principles.

Table 2: Summary of Alignment between Ostrom's Design Principles and Saskatchewan's Deposit Insurance Scheme until 2017

Design Principle		Alignment?
Clear boundary rules	As a condition of their license, credit unions were required to participate in the deposit insurance scheme and fulfill all related legislative and regulatory requirements. Credit unions that failed to live up to these expectations were (are) put on a watch list and, if they fail to turn themselves around, can be wound down or merged into another credit union.	✓
Benefits and costs allocated proportionately; decisions reflect local needs and circumstances	While Saskatchewan's deposit insurance scheme assesses a fee set as a fixed percentage of credit union assets — and is therefore proportional to the size of the credit union — the benefits do not necessarily align, given that the scheme exists to pay out funding in the event of (infrequent) problems.	✓
Resource appropriators devise own rules	Until 2017, credit unions, through SaskCentral, had direct influence over the legislative and policy process. The Mutual Aid Board consisted of three credit union representatives, including the chief executive officer of SaskCentral. Further, SaskCentral provided management functions to the Mutual Aid Board.	✓
Low-cost arenas for dispute resolution	Credit unions were able to resolve disputes through a variety of forums, including regional managers' meetings, province-wide meetings of SaskCentral, annual conferences, and through involvement in SaskCentral's governance process. The Mutual Aid Board and Deposit Guarantee Corporation are themselves low-cost dispute resolution mechanisms — operational costs are funded through returns on investments of the insurance fund — effectively controlled by the credit union system they help police.	✓
Self-policing/monitoring	Three fifths of the Mutual Aid board members were appointed by SaskCentral. Further, SaskCentral provided the management/administrative services for the Mutual Aid Board (initially for a nominal $25/month but later running into the millions of dollars) and its successor organization, the Credit Union Deposit Guarantee Corporation. SaskCentral is owned and controlled by Saskatchewan credit unions.	✓
Escalating sanctions	The Mutual Aid Board's adoption of an early-warning watch list suggests a corresponding mechanism to facilitate escalating interventions that while not sanctions per se, would have been perceived as intrusive and penalty-like by the credit union on the receiving end of the action.	✓
Supportive policy context	Saskatchewan's credit union system owes its existence in some large measure to supportive government action and a favourable political climate. The province has consistently updated and modernized legislation and its regulatory framework in close collaboration with the movement. It has also taken steps to allow the industry an increasing degree of self-regulation, albeit with the always-present threat that if the sector didn't take matters into its own hands, the province would act to protect its and the public's interests.	✓
Nested decision making	The credit union "commons" implicates several different decision-making processes, each nested within the other. It begins with the members who elect their local board of directors and then moves up a level to credit unions voting for representation on the SaskCentral board and, through the SaskCentral board, the governance of the Mutual Aid Board / Credit Union Deposit Guarantee Corporation.	✓

5.0 RECENT DEVELOPMENTS AND THEIR IMPLICATIONS

As the Credit Union Deposit Guarantee Corporation's annual reports make clear, it has made significant changes since 2017 to the way it governs itself and its relationship with SaskCentral, and through SaskCentral, the provincial credit union system. In 2016, for example, the *Act* was amended such that while SaskCentral has the right to select half the persons sitting on CUDGC's nominating committee, the committee's appointees to the board cannot consist of SaskCentral or credit union officials (the changes came into force in 2017). Similarly, the nominating committee is not allowed to appoint government employees to the board, although the government has two representatives in the form of the deputy minister (or nominee) responsible for credit unions and the deputy minister (or nominee) of finance.

Until recently, almost half of CUDGC's deposit insurance fund was held in credit-union-related assets. This is no longer the case. As of 2018, the only remaining credit-union-related investment consists of a $7.5 million investment in instruments issued by Concentra Bank, an entity largely owned and effectively controlled by Saskatchewan credit unions. This is down from more than $12 million in 2017. The bulk of funds are held instead in provincial and federal bonds as well as instruments issued by the federally regulated chartered banks. Further, CUDGC appears to be in the process of severing its management agreement with SaskCentral.[11] In its 2018 report, it notes that it has moved or outsourced fourteen functions previously managed by SaskCentral. It is not clear if this process is complete or if there are still functions to be moved. It seems only a matter of time before the governance relationship with the credit union sector changes as well.

There appear to be several reasons for these changes. As a result of 2010 changes to the federal *Bank Act* that made it possible for a provincial credit union to continue as a federally incorporated and regulated entity,[12] CUDGC has also had to develop policies and procedures around the potential exit of one of its credit unions from the fund. This possibility is increasingly real, with the third largest Saskatchewan credit union—Innovation—having received approval from its membership to continue as a federal entity and working hard to obtain the necessary federal approvals. In response to a proposal by Innovation that it have access to its proportionate share of the deposit insurance fund, CUDGC has said it considers the fund "an asset of the corporation" and that a credit union continuing federally is "not entitled to any portion of the fund" (CUDGC, FAQ). This view is not inconsistent with Schroeder's account, although his analysis also suggests suggest that the fund—through the revolving plan and interest paid on the pool—was at least in its early incarnation, viewed as entirely a creature of credit unions. This shifted with the legislative and taxation policy changes in 1972 and later, but even then, the credit union sector's continued ability to appoint board members also suggests that CUDGC's claim is less robust than it might appear.

Then, in 2013, the federal government made several changes to its financial services legislation that effectively cut the provincial credit union system off from any explicit federal support. Motivated by concern about the growing size of the credit union system and perceptions of lax regulatory oversight by provinces and their deposit insurance corporations, the federal government amended the *Canada Deposit Insurance Act* to remove the optional line of credit it had introduced in the 1970s. It similarly amended the *Bank of Canada Act* to add an explicit requirement that provinces provide the central bank with an indemnity for any lending it might make to a provincially incorporated credit union. And most importantly, the federal regulator announced its intention to cease regulating (as of 2017) provincial centrals, a shift that led to the legislative changes discussed earlier around the composition of the CUDGC board. On balance, the federal government has purposely made it increasingly difficult for the credit union system to operate as it once had.

6.0 CONCLUSION AND POLICY LESSONS

In making the case for the alignment of Ostrom's design principles to Saskatchewan's deposit insurance scheme, I have tried to resist the tendency to "force the fit," as it were. While there is good evidence of conformity across the principles, there are some difficult questions around the evidence assembled here.

It is important to recognize, for example, that this is an early effort based on access to readily available documents from libraries and the Internet. The author intends to augment this with interviews, deeper archival work, and data analysis to assess these findings. Among other things, this effort might help determine whether the sector really did a good job of self-monitoring, when it is highly likely that many failed or failing credit unions were forced into "shotgun" marriages with better managed credit unions. Further, it will help answer how effective the escalating sanctions were, given these forced marriages. Moreover, it might look at whether the system is really "nested," since it is well known that credit union members are largely inactive or inattentive to what their credit unions are doing (see, for example, Goth, McKillop, and Wilson 2012) and that many smaller credit unions lack the wherewithal to participate effectively in system-level discussions. And can we really say that credit unions "designed their own rules," or are we talking about a hybrid situation where government and credit unions have co-created and co-produced the policy framework? This initial survey suggests that co-construction is the more plausible explanation.

Still, the historical trajectory is suggestive of something interesting and important having taken place in a seemingly unlikely locale or, rather, the most propitious of locales for a socially constructed commons. Throughout the evolution of the deposit insurance scheme, provincial policymakers and the sector appear to have worked closely to protect the interests of members and the residents of the Province of Saskatchewan, while helping to ensure a degree of banking competition that appears to have served citizens well. Credit unions in Saskatchewan and elsewhere routinely come out on top in public opinion surveys asking about the quality of banking services (CCUA 2018b). Further, Saskatchewan's credit unions have an estimated 50 percent market share in the small and medium-sized enterprise market, a segment traditionally neglected—particularly in the western provinces—by Canada's largest banks (SaskCentral 2018). While credit unions, like banks, continue to step back from branch services in rural areas, their presence in rural Saskatchewan is markedly higher than it is for the banks.

But the political economy of Canada's brand of federalism has asserted itself at various points in the historical evolution of the sector, ultimately, we would argue, undermining the socially constructed commons that characterized the provincial credit union system and its deposit insurance scheme. To some extent, the resulting tension between federal and provincial policymakers can be traced back to the Constitution, which gives jurisdiction over banking matters to the federal government. The federal government, however, has allowed the provinces to encroach on this space (by incorporating deposit-taking credit unions), resulting in a stalemate on the question of whether "banking" is truly a solely federal jurisdictional matter.[13]

At the same time, the federally regulated banks have been unhappy with the idea of provincially regulated credit unions —with supposedly moral-hazard-inducing unlimited deposit insurance schemes—competing against them vigorously for business in provinces that were slowly but surely coming onto their own economically. The signposts of federal unease are notable and get louder through time. In the 1960s, the federal government refused to use CDIC to backstop provincial credit unions. In the early 1970s, credit unions became subject to taxation. In the 1980s, things went relatively quiet as federal policymakers wrestled with the fallout from major failures in their own backyard (e.g., Canadian Northland Bank and the Canadian Western Bank) and legislative changes that broke down the silos that had characterized the financial services sector. The consequences of the financial crisis revealed that the federal government knew relatively little about the increasingly large and concentrated credit union system. In response, the federal government introduced a series of policy changes that not only threatened the commons that served the sector well, but also failed to provide any real path forward for the system to collaborate across provincial boundaries. From this initial survey, the federal government's efforts to wash its hands of the provincial credit union sector is not only at its peril but also that of all Canadians.

7.0 FOOTNOTES

[1] One of the earliest documented bank runs took place in AD 33, which according to Calomiris (1989), "brought the financial and business world of Rome to the brink of disaster."

[2] According to Garcia (1999), Czechoslovakia had the first national-level deposit insurance scheme. The United States, which had several state-level schemes in the 1800s and early 1900s, followed shortly thereafter with arguably the world's best-known deposit insurance scheme, the Federal Deposit Insurance Corporation (FDIC). The FDIC was created in 1933 to help arrest widespread bank runs. Equivalent schemes were eventually created for mutual and loan companies as well as credit unions.

[3] Historically, Canada's banks have been headquartered — as well as owned and effectively controlled — in central Canada, i.e., the industrialized provinces of Ontario and Quebec.

[4] After 1965, the year in which the number of credit unions in Saskatchewan peaked, the number of credit unions dissolving exceeded the number of new ones. As Schroeder notes, many credit unions simply folded because of declining membership; others were insolvent but lacked the kind of community support that proved essential to turning around the two credit unions that experienced management defalcations in the early 1950s (1983, 58).

[5] Notwithstanding this legislative change, CUDGC Saskatchewan says on its website that there "there is no explicit provincial government backstop on deposits held in Saskatchewan credit unions" (https://www.cudgc.sk.ca/faqs/).

[6] See the discussion above about the vote in favour of creating the fund/board.

[7] This is remarkable considering that the Bank of Canada—Canada's central bank—built its first computerized model of the Canadian economy around the same time.

[8] This last point is of interest. Schroeder's (1983) account emphasizes the importance of the 1977 legislative changes that gave explicit support to the Mutual Aid Board guarantee, a move he implies created a true deposit insurance scheme. However, the Mutual Aid Board's history — from the voluntary donations that preceded its creation, to its mandate to "assist in payment of losses incurred by members of credit unions in liquidation" (Purden 1980, 84) and its subsequent interest-free loans — shows that the ultimate concern was with protecting the interest of depositors and avoiding the risk of a deposit run through stabilization activities (e.g., capital injections) rather than paying out members after the failure of a credit union. Schroeder opens his book by quoting, approvingly, from the Credit Union League's managing director who, in response to a (1967) letter from a worried credit union member, emphasized that since their inception in 1937, "no member has ever lost one cent in deposits or share capital."

[9] In her account of the Saskatchewan system's early years, Purden (1980) tells the fascinating story of how the Canadian banks tried to shut credit unions out of the payments system. They were ultimately unsuccessful.

[10] Thirty-one years later, the federal government made larger credit unions ineligible for a preferential small-business tax rate.

[11] See Credit Union Deposit Guarantee Corporation, Annual Report 2018.

[12] Technically, federal continuance only became a real possibility after the introduction of associated regulations in 2012.

[13] This is reflected in a common policy shorthand for describing this situation: The federal government has sole discretion to regulate "banks" but not banking.

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JOHNSON SHOYAMA
Canadian Centre for the Study of Co-operatives
UREGINA USASK

Diefenbaker Building, 101 Diefenbaker Place,
University of Saskatchewan
Saskatoon, Saskatchewan
S7N 5B8

Ph: 306-966-8509
Email: coop.studies@usask.ca